

CSE341 PROJECT REPORT

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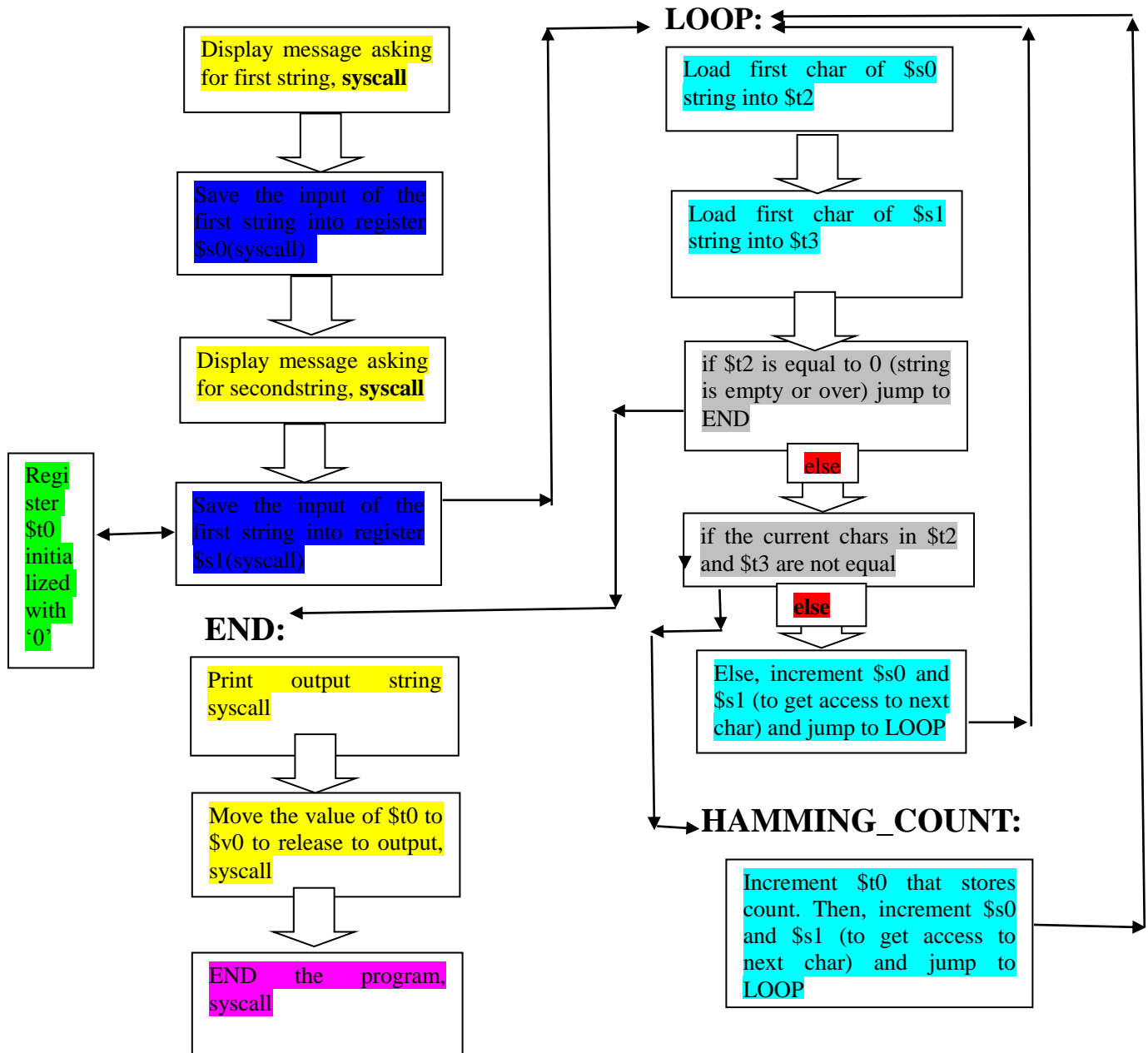
HAMMING DISTANCE

Registers used: \$t0, \$t2, \$t3, \$s0, \$s1, \$v0

Total Sycalls used: 7

#.space in the beginning would tell us how many spaces are supposed to be allotted. This code can work for any number of spaces as specified by the report question

MAIN:



2.) FLOWCHART EXPLAINING RADICATION EUCLIDEAN DISTANCE

MAIN:

Shift bit left by 30 for the register \$t0 (which had 1 initially; multiplying by 2^{30}). Go to **FIRSTLOOP**

ELSE:

Subtract to \$t1, \$t1-\$t6

Shift right the bits of t4 by 1 (dividing by 2).

Add to \$t4, \$t4 and \$t0

LAST:

Shift right the bits of t0 by 2 (dividing by 4). JUMP to **SECONDLOOP**

END:

Print output string (syscall)

Move the value of \$t4 to \$v0 to release to output, syscall

END the program, syscall

FIRSTLOOP:

if t1<t0...\$t5=1.

If \$t5=0, branch to the **SECONDLOOP**

ELSE

NOP stage

Shift right the bits of t0 by 2 (dividing by 2^2). JUMP to **FIRSTLOOP**

SECONDLOOP:

If \$t0=0 branch to end

ELSE

NOP stage

Add to \$t6, \$t4 and \$t0

if t1<t6...\$t5=1.

If \$t5=0 branch to else

ELSE

NOP

Shift right the bits of t4 by 1 (dividing by 2). JUMP to **LAST**